

SEQUENCE LISTING

<110> KANNOUCHE, PATRICIA

MAUFFREY, PHILLIPE

PINON-LATAILLADE, GHISLAINE

BIARD, DENIS

ANGULO-MORA, JAINE

<120> SEQUENCES CODING FOR KIN17 PROTEIN AND THEIR APPLICATIONS

<130> 102863US0PCT

<140> 09/555,529

<141> 2000-07-24

Ar <150> PCT/FR98/02667

<151> 1998-12-09

<150> FR97 15536

<151> 1997-12-09

<160> 36

<170> PatentIn version 3.0

<210> 1

<211> 1528

<212> DNA

<213> Homo sapiens

<400> 1

ctagaattca gcgccgctg aattctagaa ctgggggtcca gaaagtgatc gctgccgtgg	60
tcgccatggg gaagtcggat tttcttactc ccaaggctat cgccaacagg atcaagtcca	120
aggggctgca gaagctacgc tgggtattgcc agatgtgcca gaagcagtgc cgggacgaga	180
atggctttaa gtgtcattgt atgtccgaat ctcacagag acaactattg ctggcttcag	240
aaaatcctca gcagtttatg gattatTTTT cagaggaatt ccgaaatgac tttctagaac	300
ttctcaggag acgctttggc actaaaaggg tccacaacaa cattgtctac aacgaatata	360
tcagccaccg agagcacatc cacatgaatg ccactcagtg ggaaactctg actgatttta	420
ctaagtggct gggcagagaa ggcttgtgca aagtggacga gacaccaaaa ggctggtata	480
ttcagtagat agacagggac ccagaaacta tccgccggca actggaactg gagaaaaaga	540
aaaagcagga ccttgatgat gaagaaaaaa ctgccaaatt tattgaagag caagtgagaa	600
gaggcctgga agggaaggaa caggaggtcc ctacttttac ggaattaagc agagaaaatg	660
atgaagagaa agtcacgttt aatttgagta aaggagcatg tagctcatcc ggagcaacat	720
cttccaagtc aagtactctg ggaccgagtg cactgaagac gataggaagt tcagcatcag	780
tgaaacgaaa agaattcttc cagagctcaa ctcagtctaa agaaaagaag aaaaagaaat	840
ctgcactgga tgaaatcatg gagattgaag aggaaaagaa aagaactgcc cgaacagact	900
actggctaca gcctgaaatt attgtgaaaa ttataacca gaaactggga gagaaatata	960
ataagaaaaa ggctattgtt aaggaagtaa ttgacaaata tacagctgtt gtgaagatga	1020
ttgattctgg agacaagctg aaacttgacc agactcattt agagacagta attccagcac	1080
caggaaaaag aattctagtt ttaaattggag gctacagagg aatgaaggt accctagaat	1140
ccatcaatga gaagactttt tcagctacta tcgtcattga aactggccct taaaaggac	1200
gcagagttga aggaattcaa tatgaagaca tttctaaact tgcctgagtt tgaaaatttg	1260
ttaacaatac attaaaatct taaagcatca aattggtgtt cgccaaggca ttatgagact	1320
ctactgtgtt agggatatatt cttttgtata aaacaaacag gtttttgaaa atattactgt	1380
atagttgttc agctaaactt tgagaagaat ttaattatgt ctcagaggt atcaaactat	1440
gtaattttgt ccttgttatt tttgtttcct ttgtaattta cttgatgagt ttatatcttc	1500
attaaagaat gttattataa aaaaaaaa	1528

<210> 2

<211> 1102

<212> DNA

<213> Mus sp.

<400> 2

atgggcaagt cggattttct gagccccaag gccatcgcca atagaattaa gtccaaaggg	60
ctccagaagc ttcgctggta ctgccagatg tgccaaaagc aatgccgcga cgagaatggc	120
tttaagtgtc actgtatgtc tgaatctcat caaagacaac tgttgctggc ttcagaaaac	180
cctcagcagt ttatggatta tttttcagag gaattccgaa atgactttct ggaacttctg	240
aggcgacgct ttggcactaa aagggtccac aacaacattg tctacaatga atacatcagc	300
caccgagagc acatccacat gaacgctacc cagtgggaga cactgaccga ctttaccaag	360
tggtctgggca gagagggctt gtgtaaaggt accagtgcac tgaagctgct ggggagcgca	420
gcatccggga aacggaaaga gtcttcacag agctccgcc agcctgcaa gaagaagaag	480
tcggccctgg atgagatcat ggagctcaa gaggaaaaga aaaggaccgc acggacagac	540
gcctgggttac agccggggat cgttgtgaaa attataacga agaagcttgg ggagaaatat	600
cacaagaaga aaggggtcgt taaggaagt attgacaggt acacagctgt ggtaaagatg	660
actgactctg gagacaggct gaaactggac cagactcatt tagagacagt cattccggcc	720
ccggggaaaa gggttctagt tttaaatgga ggctacagag gaaatgaagg cactctcgaa	780
tccatcaatg agaaggcttt ttcagccacg atagtcattg aaactggacc tttgaaagga	840
cgagagttg aaggtattca atatgaagac atatctaaac ttgcttgagt ttgaaaattt	900
gataacaaca cattgaaact gtgaagcatc aaattggtgt tagccaaggc actgtgtaac	960
tctactgtgt taggggattt gttttgtatt aaaaaaaaaa aaatcatcta tttaaatact	1020
agtgaatagt tgggtaaatt tataataaaa tctatgtttt ttttaagtgt aaaaaaaaaa	1080
aaaaaaaaaa aaaaaaaaaa aa	1102

<210> 3

<211> 1002

<212> DNA

<213> Homo sapiens

<400> 3

tgattcgagc tcggtacccg gggatccgat tagaaagtga tcgctgccgt ggtcgccatg	60
gggaagtcgg attttcttac tccaaggct atcgccaaca ggatcaagtc caaggggctg	120

cagaagctac gctgggtattg ccagatgtgc cagaagcagt gccgggacga gaatggcttt 180
 aagtgtcatt gtatgtccga atctcatcag agacaactat tgctggcttc agaaaatcct 240
 cagcagttta tggattattt ttccaggaa ttccgaaatg actttctaga acttctcagg 300
 agacgctttg gcactaaaag ggtccacaac aacattgtct acaacgaata catcagccac 360
 cgagagcaca tccacatgaa tgccactcag tgggaaactc tgactgattt tactaagtgg 420
 ctgggcagag aaggcttgtg caaaagtgc ctgaagacga taggaagttc agcatcagt 480
 aaacgaaaag aatcttccca gagctcaact cagtctaaag aaaagaagaa aaagaaatct 540
 gcactggatg aaatcatgga gattgaagag gaaaagaaaa gaactgcccg aacagactac 600
 tggctacagc ctgaaattat tgtgaaaatt ataaccaaga aactgggaga gaaatatcat 660
 aagaaaaagg ctattgttaa ggaagtaatt gacaaatata cagctgttgt gaagatgatt 720
 gattctggag acaagctgaa acttgaccag actcatttag agacagtaat tccagcacca 780
 ggaaaaagaa ttctagtttt aaatggaggc tacagaggaa atgaaggtag cctagaatcc 840
 atcaatgaga agactttttc agctactatc gtcattgaaa ctggcccttt aaaaggacgc 900
 agagttgaag gaattcaata tgaagacatt tctaaacttg cctgagtttg aaaatttggt 960
 aacaatacct ttaaaatctt aaagcatcaa attggtgttc gc 1002

<210> 4

<211> 1002

<212> DNA

<213> Homo sapiens

<400> 4

tcagagacaa ctattgctgg cttcagaaaa tcctcagcag tttatggatt atttttcaga 60
 ggaattccga aatgactttc tagaacttct caggagacgc tttggcacta aaaggtcca 120
 caacaacatt gtctacaacg aatacatcag ccaccgagag cacatccaca tgaatgccac 180
 tcagtgggaa actctgactg attttactaa gtggctgggc agagaaggct tgtgcaaagt 240
 ggacgagaca ccaaaggct ggtatattca gtacatagac agggaccag aaactatccg 300
 ccggcaactg gaactggaga aaaagaaaaa gcaggacctt gatgatgaag aaaaaactgc 360
 caaatttatt gaagagcaag tgagaagagg cctggaaggg aaggaacagg aggtccctac 420
 ttttacggaa ttaagcagag aaaatgatga agagaaagtc acgtttaatt tgagtaaagg 480
 agcatgtagc tcatccggag caacatcttc caagtcaagt actctgggac cgagtgcact 540

gaagacgata ggaagttcag catcagtga acgaaaagaa tcttcccaga gctcaactca	600
gtctaaagaa aagaagaaaa agaaatctgc actggatgaa atcatggaga ttgaagagga	660
aaagaaaaga actgcccga cagactactg gctacagcct gaaattattg tgaaaattat	720
aaccaagaaa ctgggagaga aatatcataa gaaaaaggct attgttaagg aagtaattga	780
caaatataca gctgttgtga agatgattga ttctggagac aagctgaaac ttgaccagac	840
tcatttagag acagtaattc cagcaccagg aaaaagaatt ctagttttaa atggaggcta	900
cagaggaaat gaaggtaacc tagaatccat caatgagaag actttttcag ctactatcgt	960
cattgaaact ggccctttaa aaggacgcag agttgaagga at	1002

<210> 5

<211> 22

<212> DNA

<213> Homo sapiens

<400> 5	
ctcaggagac gctttggcac ta	22

<210> 6

<211> 22

<212> DNA

<213> Homo sapiens

<400> 6	
cctgggtgctg gaattactgt ct	22

<210> 7

<211> 21

<212> DNA

<213> Homo sapiens

<400> 7	
tcttttcggt tcactgatgc t	21

<210> 8

<211> 24

<212> DNA

<213> Homo sapiens

<400> 8
gggagagaaa tatkataaga aaaa

24

<210> 9

<211> 22

<212> DNA

<213> Homo sapiens

<400> 9
tccctctgta gccctcccat tt

22

<210> 10

<211> 22

<212> DNA

<213> Homo sapiens

<400> 10
ttttcagcta ctatcggtca tt

22

<210> 11

<211> 22

<212> DNA

<213> Homo sapiens

<400> 11
cgagtgcact gaagacgata gg

22

<210> 12

<211> 20

<212> DNA

<213> Homo sapiens

<400> 12
attcttttcg tttcactgat

20

<210> 13

<211> 26

<212> DNA

<213> Homo sapiens

<400> 13
ggcaatacca gcgtagcttc tgcagc

26

<210> 14

<211> 25

<212> DNA

<213> Homo sapiens

<400> 14
ctctgatgag attcggacat acaat

25

<210> 15

<211> 21

<212> DNA

<213> Homo sapiens

<400> 15
tctcctgaga agttctagaa a

21

<210> 16

<211> 40

<212> DNA

<213> Homo sapiens

<400> 16
actgccaaat ttattgaaga gcaagtgaga agaggcctgg

40

<210> 17

<211> 40

<212> DNA

<213> Homo sapiens

<400> 17
ccaggcctct tctcacttgc tcttcaataa atttggcagt

40

<210> 18

<211> 22

<212> DNA

<213> Homo sapiens

<400> 18
agaaagtgat cgctgccgtg gt

22

<210> 19

<211> 26

<212> DNA

<213> Homo sapiens

<400> 19
gcgaacacca atttgatgct ttaaga

26

<210> 20

<211> 21

<212> DNA

<213> Homo sapiens

<400> 20

tcagagacaa ctattgctgg c

21

<210> 21

<211> 22

<212> DNA

<213> Homo sapiens

<400> 21

attccttcaa ctctgcgtcc tt

22

<210> 22

<211> 291

<212> PRT

<213> Mus sp.

<400> 22

Met Gly Lys Ser Asp Phe Leu Ser Pro Lys Ala Ile Ala Asn Arg Ile
1 5 10 15

Lys Ser Lys Gly Leu Gln Lys Leu Arg Trp Tyr Cys Gln Met Cys Gln
20 25 30

Lys Gln Cys Arg Asp Glu Asn Gly Phe Lys Cys His Cys Met Ser Glu
35 40 45

Ser His Gln Arg Gln Leu Leu Leu Ala Ser Glu Asn Pro Gln Gln Phe
50 55 60

Met Asp Tyr Phe Ser Glu Glu Phe Arg Asn Asp Phe Leu Glu Leu Leu
65 70 75 80

Arg Arg Arg Phe Gly Thr Lys Arg Val His Asn Asn Ile Val Tyr Asn
85 90 95

Glu Tyr Ile Ser His Arg Glu His Ile His Met Asn Ala Thr Gln Trp
100 105 110

Glu Thr Leu Thr Asp Phe Thr Lys Trp Leu Gly Arg Glu Gly Leu Cys
115 120 125

Ala Leu Lys Leu Leu Gly Ser Ala Ala Ser Gly Lys Arg Lys Glu Ser
130 135 140

Ser Gln Ser Ser Ala Gln Pro Ala Lys Lys Lys Lys Ser Ala Leu Asp
145 150 155 160

Glu Ile Met Glu Leu Glu Glu Glu Lys Lys Arg Thr Ala Arg Thr Asp
 165 170 175
 Ala Trp Leu Gln Pro Gly Ile Val Val Lys Ile Ile Thr Lys Lys Leu
 180 185 190
 Gly Glu Lys Tyr His Lys Lys Lys Gly Val Val Lys Glu Val Ile Asp
 195 200 205
 Arg Tyr Thr Ala Val Val Lys Met Thr Asp Ser Gly Asp Arg Leu Lys
 210 215 220
 Leu Asp Gln Thr His Leu Glu Thr Val Ile Pro Ala Pro Gly Lys Arg
 225 230 235 240
 Val Leu Val Leu Asn Gly Gly Tyr Arg Gly Asn Glu Gly Thr Leu Glu
 245 250 255
 Ser Ile Asn Glu Lys Ala Phe Ser Ala Thr Ile Val Ile Glu Thr Gly
 260 265 270
 Pro Leu Lys Gly Arg Arg Val Glu Gly Ile Gln Tyr Glu Asp Ile Ser
 275 280 285
 Lys Leu Ala
 290

<210> 23

<211> 293

<212> PRT

<213> Homo sapiens

<400> 23

Met Gly Lys Ser Asp Phe Leu Thr Pro Lys Ala Ile Ala Asn Arg Ile
 1 5 10 15
 Lys Ser Lys Gly Leu Gln Lys Leu Arg Trp Tyr Cys Gln Met Cys Gln
 20 25 30
 Lys Gln Cys Arg Asp Glu Asn Gly Phe Lys Cys His Cys Met Ser Glu
 35 40 45
 Ser His Gln Arg Gln Leu Leu Ala Ser Glu Asn Pro Gln Gln Phe
 50 55 60
 Met Asp Tyr Phe Ser Glu Glu Phe Arg Asn Asp Phe Leu Glu Leu Leu
 65 70 75 80
 Arg Arg Arg Phe Gly Thr Lys Arg Val His Asn Asn Ile Val Tyr Asn
 85 90 95
 Glu Tyr Ile Ser His Arg Glu His Ile His Met Asn Ala Thr Gln Trp
 100 105 110

Glu Thr Leu Thr Asp Phe Thr Lys Trp Leu Gly Arg Glu Gly Leu Cys
 115 120 125

Ala Leu Lys Thr Ile Gly Ser Ser Ala Ser Val Lys Arg Lys Glu Ser
 130 135 140

Ser Gln Ser Ser Thr Gln Ser Lys Glu Lys Lys Lys Lys Ser Ala
 145 150 155 160

Leu Asp Glu Ile Met Glu Ile Glu Glu Glu Lys Lys Arg Thr Ala Arg
 165 170 175

Thr Asp Tyr Trp Leu Gln Pro Glu Ile Ile Val Lys Ile Ile Thr Lys
 180 185 190

Lys Leu Gly Glu Lys Tyr His Lys Lys Lys Ala Ile Val Lys Glu Val
 195 200 205

Ile Asp Lys Tyr Thr Ala Val Val Lys Met Ile Asp Ser Gly Asp Lys
 210 215 220

Leu Lys Leu Asp Gln Thr His Leu Glu Thr Val Ile Pro Ala Pro Gly
 225 230 235 240

Lys Arg Ile Leu Val Leu Asn Gly Gly Tyr Arg Gly Asn Glu Gly Thr
 245 250 255

Leu Glu Ser Ile Asn Glu Lys Thr Phe Ser Ala Thr Ile Val Ile Glu
 260 265 270

Thr Gly Pro Leu Lys Gly Arg Arg Val Glu Gly Ile Gln Tyr Glu Asp
 275 280 285

Ile Ser Lys Leu Ala
 290

<210> 24

<211> 1390

<212> DNA

<213> Mus sp.

<400> 24
 atgggcaagt cggattttct gagccccaag gccatcgcca atagaattaa gtccaaaggg 60
 ctccagaagc ttcgctggta ctgccagatg tgccaaaagc aatgccgcga cgagaatggc 120
 tttaagtgtc actgtatgtc tgaatctcat caaagacaac tgttgctggc ttcagaaaac 180
 cctcagcagt ttatggatta tttttcagag gaattccgaa atgactttct ggaacttctg 240
 aggcgacgct ttggcactaa aagggtccac aacaacattg tctacaatga atacatcagc 300
 caccgagagc acatccacat gaacgctacc cagtgggaga cactgaccga ctttaccagg 360

50					55					60					
Met	Asp	Tyr	Phe	Ser	Glu	Glu	Phe	Arg	Asn	Asp	Phe	Leu	Glu	Leu	Leu
65					70					75					80
Arg	Arg	Arg	Phe	Gly	Thr	Lys	Arg	Val	His	Asn	Asn	Ile	Val	Tyr	Asn
				85					90					95	
Glu	Tyr	Ile	Ser	His	Arg	Glu	His	Ile	His	Met	Asn	Ala	Thr	Gln	Trp
			100					105					110		
Glu	Thr	Leu	Thr	Asp	Phe	Thr	Lys	Trp	Leu	Gly	Arg	Glu	Gly	Leu	Cys
		115					120					125			
Lys	Val	Asp	Glu	Thr	Pro	Lys	Gly	Trp	Tyr	Ile	Gln	Tyr	Ile	Asp	Arg
		130					135					140			
Asp	Pro	Glu	Thr	Ile	Arg	Arg	Gln	Leu	Glu	Leu	Glu	Lys	Lys	Lys	Lys
145					150					155					160
Gln	Asp	Leu	Asp	Asp	Glu	Glu	Lys	Thr	Ala	Lys	Phe	Ile	Glu	Glu	Gln
			165						170					175	
Val	Arg	Arg	Gly	Leu	Glu	Gly	Lys	Glu	Gln	Glu	Thr	Pro	Val	Phe	Thr
			180					185					190		
Glu	Leu	Ser	Arg	Glu	Asn	Glu	Glu	Glu	Lys	Val	Thr	Phe	Asn	Leu	Asn
		195					200					205			
Lys	Gly	Ala	Gly	Gly	Ser	Ala	Gly	Ala	Thr	Thr	Ser	Lys	Ser	Ser	Ser
	210					215					220				
Leu	Gly	Pro	Ser	Ala	Leu	Lys	Leu	Leu	Gly	Ser	Ala	Ala	Ser	Gly	Lys
225					230					235					240
Arg	Lys	Glu	Ser	Ser	Gln	Ser	Ser	Ala	Gln	Pro	Ala	Lys	Lys	Lys	Lys
				245					250					255	
Ser	Ala	Leu	Asp	Glu	Ile	Met	Glu	Leu	Glu	Glu	Glu	Lys	Lys	Arg	Thr
		260					265						270		
Ala	Arg	Thr	Asp	Ala	Trp	Leu	Gln	Pro	Gly	Ile	Val	Val	Lys	Ile	Ile
		275					280						285		
Thr	Lys	Lys	Leu	Gly	Glu	Lys	Tyr	His	Lys	Lys	Lys	Gly	Val	Val	Lys
	290					295						300			
Glu	Val	Ile	Asp	Arg	Tyr	Thr	Ala	Val	Val	Lys	Met	Thr	Asp	Ser	Gly
305					310					315					320
Asp	Arg	Leu	Lys	Leu	Asp	Gln	Thr	His	Leu	Glu	Thr	Val	Ile	Pro	Ala
			325						330					335	
Pro	Gly	Lys	Arg	Val	Leu	Val	Leu	Asn	Gly	Gly	Tyr	Arg	Gly	Asn	Glu
			340					345					350		
Gly	Thr	Leu	Glu	Ser	Ile	Asn	Glu	Lys	Ala	Phe	Ser	Ala	Thr	Ile	Val
		355					360						365		

Ile Glu Thr Gly Pro Leu Lys Gly Arg Arg Val Glu Gly Ile Gln Tyr
 370 375 380

Glu Asp Ile Ser Lys Leu Ala
 385 390

<210> 26

<211> 393

<212> PRT

<213> Homo sapiens

<400> 26

Met Gly Lys Ser Asp Phe Leu Thr Pro Lys Ala Ile Ala Asn Arg Ile
 1 5 10 15

Lys Ser Lys Gly Leu Gln Lys Leu Arg Trp Tyr Cys Gln Met Cys Gln
 20 25 30

Lys Gln Cys Arg Asp Glu Asn Gly Phe Lys Cys His Cys Met Ser Glu
 35 40 45

Ser His Gln Arg Gln Leu Leu Leu Ala Ser Glu Asn Pro Gln Gln Phe
 50 55 60

Met Asp Tyr Phe Ser Glu Glu Phe Arg Asn Asp Phe Leu Glu Leu Leu
 65 70 75 80

Arg Arg Arg Phe Gly Thr Lys Arg Val His Asn Asn Ile Val Tyr Asn
 85 90 95

Glu Tyr Ile Ser His Arg Glu His Ile His Met Asn Ala Thr Gln Trp
 100 105 110

Glu Thr Leu Thr Asp Phe Thr Lys Trp Leu Gly Arg Glu Gly Leu Cys
 115 120 125

Lys Val Asp Glu Thr Pro Lys Gly Trp Tyr Ile Gln Tyr Ile Asp Arg
 130 135 140

Asp Pro Glu Thr Ile Arg Arg Gln Leu Glu Leu Glu Lys Lys Lys Lys
 145 150 155 160

Gln Asp Leu Asp Asp Glu Glu Lys Thr Ala Lys Phe Ile Glu Glu Gln
 165 170 175

Val Arg Arg Gly Leu Glu Gly Lys Glu Gln Glu Val Pro Thr Phe Thr
 180 185 190

Glu Leu Ser Arg Glu Asn Asp Glu Glu Lys Val Thr Phe Asn Leu Ser
 195 200 205

Lys Gly Ala Cys Ser Ser Ser Gly Ala Thr Ser Ser Lys Ser Ser Thr
 210 215 220

Leu Gly Pro Ser Ala Leu Lys Thr Ile Gly Ser Ser Ala Ser Val Lys
 225 230 235 240
 Arg Lys Glu Ser Ser Gln Ser Ser Thr Gln Ser Lys Glu Lys Lys Lys
 245 250 255
 Lys Lys Ser Ala Leu Asp Glu Ile Met Glu Ile Glu Glu Glu Lys Lys
 260 265 270
 Arg Thr Ala Arg Thr Asp Tyr Trp Leu Gln Pro Glu Ile Ile Val Lys
 275 280 285
 Ile Ile Thr Lys Lys Leu Gly Glu Lys Tyr His Lys Lys Lys Ala Ile
 290 295 300
 Val Lys Glu Val Ile Asp Lys Tyr Thr Ala Val Val Lys Met Ile Asp
 305 310 315 320
 Ser Gly Asp Lys Leu Lys Leu Asp Gln Thr His Leu Glu Thr Val Ile
 325 330 335
 Pro Ala Pro Gly Lys Arg Ile Leu Val Leu Asn Gly Gly Tyr Arg Gly
 340 345 350
 Asn Glu Gly Thr Leu Glu Ser Ile Asn Glu Lys Thr Phe Ser Ala Thr
 355 360 365
 Ile Val Ile Glu Thr Gly Pro Leu Lys Gly Arg Arg Val Glu Gly Ile
 370 375 380
 Gln Tyr Glu Asp Ile Ser Lys Leu Ala
 385 390

<210> 27

<211> 21

<212> DNA

<213> Mus sp.

<400> 27

tcaaagacaa ctgttgctgg c

21

<210> 28

<211> 22

<212> DNA

<213> Mus sp.

<400> 28

ataccttcaa ctctgcgtcc tt

22

<210> 29

<211> 24

<212> DNA

<213> Mus sp.

<400> 29

aagctgctgc agcagcttat cggg

24

<210> 30

<211> 26

<212> DNA

<213> Mus sp.

<400> 30

ggtaccttta cacaagccct ctcgcc

26

<210> 31

<211> 27

<212> DNA

<213> Mus sp.

<400> 31

ggtaccagtg cactgaagct gctgggg

27

<210> 32

<211> 20

<212> DNA

<213> Mus sp.

<400> 32

atttacccaa ctattcacta

20

<210> 33

<211> 333

<212> DNA

<213> Homo sapiens

<400> 33

cctgaaatta ttgtgaaaat tataaccaag aaactgggag agaaatatca taagaaaaag	60
gctattgtta aggaagtaat tgacaaatat acagctgttg tgaagatgat tgattctgga	120
gacaagctga aacttgacca gactcattta gagacagtaa ttccagcacc aggaaaaaga	180
attctagttt taaatggagg ctacagagga aatgaaggta ccctagaatc catcaatgag	240
aagacttttt cagctactat cgtcattgaa actggccctt taaaaggacg cagagttgaa	300
ggaattcaat atgaagacat ttctaaactt gcc	333

<210> 34

<211> 333

<212> DNA

<213> Mus sp.

<400> 34

ccgggggatcg ttgtgaaaat tataacgaag aagcttgggg agaaatatca caagaagaaa	60
ggggtcgtta aggaagtgat tgacaggtac acagctgttg taaagatgac tgactctgga	120
gacaggctga aactggacca gactcattta gagacagtca ttccggcccc ggggaaaagg	180
gttctagttt taaatggagg ctacagagga aatgaaggca ctctcgaatc catcaatgag	240
aaggcttttt cagccacgat agtcattgaa actggacctt tgaaaggacg cagagttgaa	300
ggtattcaat atgaagacat atctaaactt gct	333

<210> 35

<211> 310

<212> PRT

<213> Homo sapiens

<400> 35

Pro Arg Gly Leu Ile Leu Glu Ile Leu Glu Val Ala Leu Leu Tyr Ser

1	5	10	15
Ile Leu Glu	Ile Leu Glu Thr His Arg	Leu Tyr Ser Leu Tyr Ser Leu	
20	25	30	
Glu Gly Leu Tyr Gly Leu Leu Tyr Ser Thr Tyr Arg His Ile Ser Leu			
35	40	45	
Tyr Ser Leu Tyr Ser Leu Tyr Ser Ala Leu Ala Ile Leu Glu Val Ala			
50	55	60	
Leu Leu Tyr Ser Gly Leu Val Ala Leu Ile Leu Glu Ala Ser Pro Leu			
65	70	75	80
Tyr Ser Thr Tyr Arg Thr His Arg Ala Leu Ala Val Ala Leu Val Ala			
85	90	95	
Leu Leu Tyr Ser Met Glu Thr Ile Leu Glu Ala Ser Pro Ser Glu Arg			
100	105	110	
Gly Leu Tyr Ala Ser Pro Leu Tyr Ser Leu Glu Leu Tyr Ser Leu Glu			
115	120	125	
Ala Ser Pro Gly Leu Asn Thr His Arg His Ile Ser Leu Glu Gly Leu			
130	135	140	
Thr His Arg Val Ala Leu Ile Leu Glu Pro Arg Ala Leu Ala Pro Arg			
145	150	155	160
Gly Leu Tyr Leu Tyr Ser Ala Arg Gly Ile Leu Glu Leu Glu Val Ala			
165	170	175	
Leu Leu Glu Ala Ser Asn Gly Leu Tyr Gly Leu Tyr Thr Tyr Arg Ala			
180	185	190	
Arg Gly Gly Leu Tyr Ala Ser Asn Gly Leu Gly Leu Tyr Thr His Arg			
195	200	205	
Leu Glu Gly Leu Ser Glu Arg Ile Leu Glu Ala Ser Asn Gly Leu Leu			
210	215	220	
Tyr Ser Thr His Arg Pro His Glu Ser Glu Arg Ala Leu Ala Thr His			
225	230	235	240
Arg Ile Leu Glu Val Ala Leu Ile Leu Glu Gly Leu Thr His Arg Gly			
245	250	255	
Leu Tyr Pro Arg Leu Glu Leu Tyr Ser Gly Leu Tyr Ala Arg Gly Ala			
260	265	270	
Arg Gly Val Ala Leu Gly Leu Gly Leu Tyr Ile Leu Glu Gly Leu Asn			
275	280	285	
Thr Tyr Arg Gly Leu Ala Ser Pro Ile Leu Glu Ser Glu Arg Leu Tyr			
290	295	300	
Ser Leu Glu Ala Leu Ala			
305	310		

<210> 36

<211> 311

<212> PRT

<213> Mus sp.

<400> 36

Pro Arg Gly Leu Tyr Ile Leu Glu Val Ala Leu Val Ala Leu Leu Tyr
1 5 10 15

Ser Ile Leu Glu Ile Leu Glu Thr His Arg Leu Tyr Ser Leu Tyr Ser
20 25 30

Leu Glu Gly Leu Tyr Gly Leu Leu Tyr Ser Thr Tyr Arg His Ile Ser
35 40 45

Leu Tyr Ser Leu Tyr Ser Leu Tyr Ser Gly Leu Tyr Val Ala Leu Val
50 55 60

Ala Leu Leu Tyr Ser Gly Leu Val Ala Leu Ile Leu Glu Ala Ser Pro
65 70 75 80

Ala Arg Gly Thr Tyr Arg Thr His Arg Ala Leu Ala Val Ala Leu Val
85 90 95

Ala Leu Leu Tyr Ser Met Glu Thr Thr His Arg Ala Ser Pro Ser Glu
100 105 110

Arg Gly Leu Tyr Ala Ser Pro Ala Arg Gly Leu Glu Leu Tyr Ser Leu
115 120 125

Glu Ala Ser Pro Gly Leu Asn Thr His Arg His Ile Ser Leu Glu Gly
130 135 140

Leu Thr His Arg Val Ala Leu Ile Leu Glu Pro Arg Ala Leu Ala Pro
145 150 155 160

Arg Gly Leu Tyr Leu Tyr Ser Ala Arg Gly Val Ala Leu Leu Glu Val
165 170 175

Ala Leu Leu Glu Ala Ser Asn Gly Leu Tyr Gly Leu Tyr Thr Tyr Arg
180 185 190

Ala Arg Gly Gly Leu Tyr Ala Ser Asn Gly Leu Gly Leu Tyr Thr His
195 200 205

Arg Leu Glu Gly Leu Ser Glu Arg Ile Leu Glu Ala Ser Asn Gly Leu
210 215 220

Leu Tyr Ser Ala Leu Ala Pro His Glu Ser Glu Arg Ala Leu Ala Thr
225 230 235 240

His Arg Ile Leu Glu Val Ala Leu Ile Leu Glu Gly Leu Thr His Arg

245

250

255

Gly Leu Tyr Pro Arg Leu Glu Leu Tyr Ser Gly Leu Tyr Ala Arg Gly
260 265 270

Ala Arg Gly Val Ala Leu Gly Leu Gly Leu Tyr Ile Leu Glu Gly Leu
275 280 285

Asn Thr Tyr Arg Gly Leu Ala Ser Pro Ile Leu Glu Ser Glu Arg Leu
290 295 300

Tyr Ser Leu Glu Ala Leu Ala
305 310